# REPLY TO ATTENTION OF

# DEPARTMENT OF THE ARMY

INSTALLATION MANAGEMENT COMMAND UNITED STATES ARMY GARRISON, SCHWEINFURT CMR 457 APO AE 09033

IMEU-SWF-SO

MEMORANDUM FOR SEE DISTRIBUTION

SUBJECT: Policy Memorandum 9-6, Heat Injury Prevention Program

### 1. References:

- a. Technical Bullet (TB) MED 507, Heat Stress Control and Heat Casualty Management, 07 March 2003.
- b. AE Pamphlet 385-15, Leader's Operational Accident-Prevention Guide, 18 May 2005.
- 2. Heat injuries continue to be a serious threat to U.S. Army Soldiers and civilian employees. The four most common variables attributable to heat injury are:
  - a. Climate.
  - b. Intensity and duration of the activity.
  - c. Individual's risk factors.
  - d. Improper re-hydration.
- 3. The risk of heat injury is increased when the variables in paragraph 2 are out of balance. Commanders, supervisors, and other leaders will ensure the following actions are taken to prevent heat injuries during operations and training activities and at workplaces:
- a. Educate Soldiers and U.S. civilian employees on how important it is to promptly recognize the signs and symptoms of heat injuries and to seek immediate treatment.
- b. Obtain the WBGT heat index for Dittelbrunn Range and Local Training Area (LTA) at the  $7^{\rm th}$  U.S. Army Joint Multinational Training Command (7A JMTC), Range Control Office, 354-6917; for Schweinfurt/Wuerzburg at the USAG Schweinfurt, Community Operation Center (COC), 354-6708.

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- c. Modify the duty or work uniform to be appropriate for the activity. This can include covering or applying sunscreen to exposed skin to prevent sunburn.
- d. Monitor water intake and modify work/rest cycles using the WBGT readings and the Work/Rest/Water Consumption Table in the enclosure.
- e. Conduct daily risk assessments and pre-mission planning for routine activities, as well as for rigorous activities. Adjust work schedules to avoid the hottest part of the day.
- f. Educate Soldiers and U.S. civilian employees on potential individual risk factors (including acute or chronic medical problems, use of medications and dietary or performance-enhancing supplements, being overweight or dieting, and having a history of heat injury). Ensure individuals at risk consult with their health-care provider.
- g. Insure individuals who have a history of heat injury are monitored using "the buddy system" when conduction training or strenuous activities.
- h. Incorporate heat-injury prevention into safety briefings before work assignments and training events.
- 4. The Safety Office will provide the "temperature kit" and the training to individuals who measure and calculate the WBGT heat index at the beginning of the hot weather season or whenever it is required.
- 5. The USAG Schweinfurt COC will:
- a. Measure and calculate the WBGT heat index during the summer months every hour when the ambient temperature reaches 75 degrees Fahrenheit (23.89 degrees Celsius).
- b. Distribute the results by email to all activities on Ledward Barracks.
- 6. The 7<sup>th</sup> U.S. Army Joint Multinational Training Command (7A JMTC)ATC-TSC, Range Control will:
- a. Measure and calculate the WBGT heat index during the summer months every hour when the ambient temperature reaches 75 degrees Fahrenheit (23.89 degrees Celsius).
  - b. Distribute the results to the units in the LTA.
- 7. The Leighton Barracks Management Office will:

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- a. Measure and calculate the WBGT heat index during the summer months every hour when the ambient temperature reaches 75 degrees Fahrenheit (23.89 degrees Celsius).
- b. Report the result to the USAG Schweinfurt COC and to all activities located in Wuerzburg.
- 8. To prevent heat injury in indoor workplaces that do not have air conditioning but where routine activities occur, supervisors should:
- a. Open windows when indoor temperature exceeds outdoor temperatures.
  - b. Use fans.
  - c. Close window shades if shades do not restrict air movement.
  - d. Minimize lighting.
- e. Advise employees to wear light-weight clothing and to drink cool water at frequent intervals.
  - f. Adjust work schedules to avoid the hottest part of the day.
- g. Use a liberal leave policy for employees who have known medical conditions.
- h. Move to alternate worksites that offer cooler environments if possible.
- i. Consult with supporting industrial hygiene personnel to evaluate and determine work/rest cycles for indoor workplace activities where rigorous work activities occur (for example, equipment maintenance, warehouse, or industrial activities).
- 9. When the measures in paragraph seven (7) cannot reduce the heatstress index below heat-category 5, Garrison Commander may close all or part of an activity by granting excused absence (administrative leave) for LN and U.S. civilian employees who are not emergencyessential.
- 10. The proponent of this policy is the USAG Schweinfurt Safety Office, 354-1670.

"Every Day... Better."

MAY 16 2007

ANTHONY E. HAAGER

LTC, QM Commanding

### Risk Management:

- 1. Determine the heat category using the WBGT reading.
- 2. Enforce fluid intake (water/electrolyte beverages) and work/rest cycle.
- 3. Modify clothing and environment to reduce risk.

Soldier tasks:

4. Plan work schedules involving high-performance activity.

Moderate Work Examples

5. Allow time for conditioning, fluid replenishment, and rest/recovery.

## WORK/REST/WATER-CONSUMPTION TABLE

(based on average sized, heat-acclimated person wearing hot-weather BDUs or civilian summer clothing)

Weapon maintenance Walking on a hard surface at 2.5 mph with less than a 30-lb load Civilian tasks: Light hand or arm work			Calisthenics or patrolling Walking on a hard surface at 3.5 mph with less than a 40-lb load, or on sand at 2.5 mph with no load  Civilian tasks:			Field assault  Walking on a hard surface at 3.5 mph with more than a 40-lb load, or on sand at 2.5 mph with no load  Civilian tasks:	
	nding controlling ma	achinery		h moderate lifting a	nd	Heavy shoveling or digg	ing
Heat Category	WBGT Index	Easy (Light) Work		k Mo	derate Wor	Hard Work	
		Work/Re Cycle	est Water Intake (qt/hr)	Cycle	t VVate Intak (qt/h	e Cycle	VVater Intake (qt/hr)
1	78 - 81.9 °F (25.5 – 27.7 °C)	No Lim	it 1/2	No limit	3/4	40 / 20 min	3/4
2 GREEN	82 - 84.9 °F (27.8 – 29.4 °C)	No Lim	it 1/2	50/10 min	3/4	30 / 30 min	1
3 YELLOW	85 - 87.9 °F (29.5 – 31 °C)	No Lim	it 3/4	40 / 20 min	3/4	30 / 30 min	1
4 RED	88 - 89.9 °F (31.1 —	No Lim	11 3/4	30 / 30 min	3/4	20 / 40 min	1

- ✓ Work/rest times and fluid intake will sustain performance and hydration for at least 4 hours of work under the specific heat category.
- ✓ Fluid needs vary depending on the individual (+/- ¼ qt/hr) and sun/shade exposure (+/- ¼ qt/hr) but should not exceed 1.5 qt/hr or 12 qt/day.

20/40

✓ Rest means minimal physical activity (sitting or standing), in the shade if possible.

50/10

- ✓ Body armor or heavy woven protective clothing adds 5 °F to the WGBT reading in humid climates.
- ✓ NBC MOPP 4 adds 10 °F to WGBT reading.

Easy (Light) Work Examples

Soldier tasks:

# Precautions:

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- >Full acclimatization can take up to 2 weeks.
- > Gradually increasing work in heat allows for adaptation.

> 90 °F

(> 32.2 °C)

- >Persons recovering from injury or illness, or in poor condition are at higher risk.
- >Dehydration can worsen over several days of heat exposure.
- > Acclimatization increases water requirements. Ensure fluid (electrolyte beverages/water) intake is increased.
- Adequate hydration is essential the night before strenuous activity.
- >Eat regular meals to replace salt. Salt tablets are unnecessary.
- >Heat stress accumulates during sequential days of strenuous activity.

10/50

Hard (Heavy) Work Examples

Soldier tasks:

- ➤Warn personnel that certain dietary supplements (for example, Ephedera, Ma Juang) and medications (for example, cold and allergy) increase heat-injury risk.
- >Medically screen personnel who have acute or chronic medical problems, or who are taking prescriptions, over-the-counter medications, or dietary supplements and those with a heat-injury history.
- ➤Visit http://chppm-www.apgea.army.mil/heat/.
- ➤Follow policy and procedures in TB MED 507.